Attachment C Operating Considerations

Reservoir	Rule used in the Model	Operational Requirements and/or Considerations
Jackson	Yes	Flood Control Rules.
	Yes	Maximum 20,000 cfs Limit at Flat Creek Gauge - Informal Flood Control Target . Exceeded if needed to maintain flood control space. Channel capacity in this area subject to change
	Yes	Minimum winter release 280 cfs or inflow whichever is less - Administrative decision based on Wyoming Game and Fish recommendation, nothing formal
	No	Maximum winter release 600 cfs October thru March - Informal for fish.
	No	Ramp up limit 50 cfs/day October 1 to early spring - Informal rule of thumb.
	No	Ramp down limit 30 cfs/day October 1 to early spring - Informal rule of thumb.
	No	Minimum 2,000 cfs through September - Informal desired by boaters.
	No	Minimum 5,000 cfs for Alpine Canyon Reach - Informal desired by whitewater outfitters (guide books recommend 1,000 - 10,000 cfs).
Palisades	Yes	Flood Control Rules.
	Yes	Maximum Limit of 20,000 cfs at Heise - Flood Control Target
	No	Start of irrigation minimum 500-1000 cfs at Lorenzo - Informal to avoid dewatering river reaches.
	Yes	Minimum Winter 550 cfs October thru March - Resolution of the Committee of Nine in consideration of aquatic resources .
	No	Minimum Winter 1500 cfs - Informal at suggestion of Idaho Game & Fish for juvenile trout protection.
	No	Ramp down limit 0.5 foot of stage per 2 hours near Irwin gauge - Informal .
Grassy Lake	Yes	No winter releases.
Island Park	No	Initial Maximum 7,800 cfs at Rexburg - Although official flood stage , flooding is limited to lowland pastures and small amounts of crops.
	No	Maximum 12,000 cfs at Rexburg -Informal Channel Capacity at which level infrastructure damage begins.
	No	Normal Operation Maximum 2,000 cfs - Informal to avoid flooding in last chance area while not under flood control operations.
	Yes	Normal Flood Control Maximum 3,260 cfs when below spillway - System constraint maximum due to outlet gates. If higher releases

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		needed for flood control, spillway will provide.
	Yes	Minimum Summer 1,200 cfs at St. Anthony gauge - Informal to meet demands when water supply is adequate. Not expected to exceed 1,500 cfs to meet demand.
	No	Minimum Summer 1,000 cfs near Rexburg - Informal rule of thumb to meet demands in poor runoff years.
	No almost always met	Minimum Winter Target 300 cfs - Informal if water year and space holders allow.
Ririe	Yes	Flood Control Rules.
	No - exceeded as need to meet Flood Control Rules	Limit of 1,200 cfs - Flood Control Target.
	No	Maximum 400 cfs - Informal to maintain the reservoir high for recreation and avoid excessive erosion of the stream channel and pump stations.
	Yes	Minimum 30 cfs or reservoir inflow up to the water right, whichever is greater - To meet downstream natural flow rights .
American Falls	Yes	Maximum 20,000 cfs at Minidoka -Informal Reclamation Limit. No formal flood control rules. Sandbagging needed beginning at flows around 25,000 cfs.
	No	Minimum pool 100,000 acre-feet - Informal . No official minimum or conservation pool, but water quality becomes a concern below this level.
	No	Minimum 300 cfs - Informal target at recommendation of the Governor of Idaho in consideration of aquatic resources.
		Minimum 2,000 cfs in October - Informal for fish.
	No	Ramp at flows of 2,000 cfs or less is 200 cfs per hour - Informal.
	No	Ramp at flows of 2,000 cfs or greater is 500 cfs per hour - Informal .
		Minimum Elevation 4345 November thru February - Informal to prevent ice damage to structure.
Minidoka/ Walcott	Yes	Irrigation Season Maintenance of 4245 elevation at Lake Walcott - Informal to meet demands.
	Yes	Winter Season Maintenance of 4240 elevation or lower November thru February - Informal to prevent ice damage to spillway boards and dam piers.
	No	Minimum at Spillway 1,300 cfs April 15 to September 15, 1,900 cfs July and August- Commitment related to new powerplant .
	No	April 1 to October 31, but outside the above dates, first 5,035 cfs through powerplant, next 1,300 cfs through spillway - Commitment

Rule used in the Model	Operational Requirements and/or Considerations
	related to new powerplant.
No	Minimum 200 cfs - FERC License Requirement.
Not Modeled	Flood Control Rules.
Not Modeled	Maximum 1,200 cfs at Carey, Idaho - Flood Control Target.
Not Modeled	Maximum 1,100 cfs - Physical Restriction due to poor outlet tunnel conditions except under extreme conditions i.e. spill condition.
Yes	Flood Control Rules.
	Minimum 600 cfs April 1 to September 15 - Administrative decision outlined in Water Control Manual. Not always met.
Yes	Minimum 1,000 cfs - Informal consideration for rafting.
No	Avoid weekend flow changes - Informal consideration for recreation.
	Minimum 300 cfs September 16 to March 31 - Administrative decision outlined in Water Control Manual. Not always met.
Yes	Flood Control Rules.
No	Minimum 80 - 100 cfs when Lucky Peak is low - Informal , released to keep the channel watered.
Yes	Flood Control Rules.
Yes	Maximum 6,500 cfs at Glenwood Bridge - Flood Control Target.
Yes	Maximum 7,000 cfs at Parma, Idaho - Flood Control Target.
No	Ramp up and down 500 cfs per day - Informal rule of thumb.
No	Minimum 150 cfs - Informal for water quality and stream maintenance for aquatic resources. Reclamation provides 80 cfs minimum dilution for water quality. IDFG provides an additional 70 cfs for aquatic resources, which may not be available in low supply years.
No	Minimum 240 cfs preferred - Informal for water quality and in stream flow maintenance for fish and wildlife. Recommended by IDFG high & average years.
No	Target March 1 to 14, 4,500 cfs - Informal target per IDFG recommendation.
No	Target March 16 to June 30 1,100 cfs - Informal target. Consistent with IDFG recommendation.
No	Target Summer 1,100 cfs - Informal target meets irrigation flows and consistent with Ada County Parks and Waterways recommendation of 1,500 cfs or less for tubing the Boise.
Yes	Flood Control Rules.
Yes	Maximum 12,000 cfs at Horseshoe Bend - Flood Control Target.
	No Not Modeled Not Modeled Not Modeled Not Modeled Yes Yes No Yes No Yes No Yes No

Reservoir	Rule used in the Model	Operational Requirements and/or Considerations
	Yes	Powerplant.
	No	Maximum 5,000 cfs - Flood Control Target
	No	Minimum 2,300 cfs at Horseshoe Bend June, July, and August reduced to 2,000 cfs mid September - Informal to meet demand .
	No	Minimum Summer 1,300 cfs - Informal in consideration of whitewater recreation.
	No	Minimum Summer 1,000 cfs Cabarton to Smiths Ferry - Informal in consideration of most recreation uses.
	No	Minimum Summer 1,200 cfs Smiths Ferry to Banks- Informal in consideration of most recreation uses.
	Yes	Minimum 100 cfs Cascade to Cabarton Bridge reach, 200 cfs Cabarton Bridge to Smiths Ferry, and 300 cfs Smiths Ferry to Banks Reach - Informal to accommodate fishery interests.
	Yes	Minimum 200 cfs or inflow, whichever is less - IPC water right .
	No	Minimum 400 cfs Banks Reach to Black Canyon - Informal to accommodate fishery interests.
	Yes	Minimum Conservation pool 300,000 acre-feet - Environmental Assessment for the management of uncontracted space in Cascade and Deadwood.
Deadwood	Yes	Flood Control Rules.
	Yes	Maximum 12,000 cfs at Horseshoe Bend - Flood Control Target.
	No	Minimum 50 cfs below Deadwood - Administrative decision in consideration of water quality and aquatic resources.
	No	Minimum 400 cfs Banks Reach to Black Canyon - Informal to accommodate fishery interests.
	No	Minimum 650 cfs - Informal consideration of whitewater recreation on Deadwood River.
	No	Minimum 2,300 cfs at Horseshoe Bend June, July, and August reduced to 2,000 cfs mid September - Informal to meet demand .
	No	Target 800 cfs - Informal consideration as desired flow for whitewater recreation on Deadwood River.
	No	Target 1,000 cfs - Informal consideration as desired flow for whitewater recreation on South Fork Payette River (Deadwood River to North Fork).
	No	Ramp up 100 cfs first day, 200 cfs day 2 and 3, 250 cfs days 4 and 5 for flows 0-1000 cfs - Informal to accommodate recreation use on the river.
	No	Ramp up 250 cfs per 3 hours - Informal to accommodate recreation use on the river.
		Minimum Conservation pool 50,000 acre-feet - Environmental

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		Assessment for the management of uncontracted space in Cascade and Deadwood.
Black Canyon	No	Maximum 16,000 cfs at Emmett - Flood Stage.
	No	Minimum 1,000 cfs during irrigation - Informal to assist diversions.
	No	Minimum 1,100 cfs at all times and 2,500 cfs February to May - Informal to enhance waterfowl nesting downstream of Black Canyon Dam.
	Yes	Minimum 500 cfs - Informal for fish habitat and water quality.
Owyhee	Yes	Informal Reclamation Flood Control Rules.
	No	Minimum 10 cfs October thru March - Informal at the discretion of the Joint Board of Control.
	No	Minimum 100 cfs April thru September - Informal Oregon Department of Fish and Wildlife recommendation in the lower Owyhee River for stream resource maintenance.
	No	Average 200 cfs during irrigation season - Informal to meet downstream demand.
Warm Springs	Not Modeled	Flood Control Rules.
	Not Modeled	Maximum 8,000 cfs of Malheur River at Vale - Flood Control Target.
	Not Modeled	Ramp up at 1,000 cfs or less 250 cfs per 2 hours - Informal .
	Not Modeled	Ramp up at 1,000 to 2,000 cfs 500 cfs per 2 hours - Informal .
	Not Modeled	No winter releases - 2-3 cfs due to seepage.
Beulah	Not modeled	Flood Control Rules.
	Not modeled	Maximum 8,000 cfs of Malheur River at Vale - Flood Control Target.
	Not modeled	Maximum 1,000 cfs below dam - Flood Control Target.
Bully Creek	Not Modeled	Flood Control Rules.
,	Not Modeled	Maximum 8,000 cfs of Malheur River at Vale - Flood Control Target.
	Not Modeled	Maximum 3,000 cfs below dam - Flood Control Target.
Phillips Lake		Flood Control Rules.
		Maximum 500 cfs at Baker City - Flood Control Target.
Thief Valley	Not Modeled	Minimum Drawdown 3104.5 elevation - Informal due to water quality concerns downstream.
		Maximum 75 cfs as pool nears 3104.5 elevation - Informal due to

Reservoir	Rule used in the Model	Operational Requirements and/or Considerations
	Not Modeled	water quality concerns downstream.
Unity	Not Modeled	Maximum 300-400 cfs - Discharge Channel Capacity.
Mann Creek		No Considerations Identified.